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# THE NEARCTIC DORYCTINAE, VI. THE GENERA ACROPHASMUS, GLYPTOCOLASTES, DORYCTINUS, AND A NEW GENUS, STENOCORSE (Hymenoptera: Braconidae)

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The present paper deals with four genera of the Doryctinae in which the head is narrow behind the eyes and somewhat transverse. This shape of the head differs from that of the typical Doryctinae, as exemplified by *Doryctes*, and has influenced past workers to place these genera in several other supergeneric groups (see discussion in Marsh 1965). The species described below in *Acrophasmus* represent the first records of this genus for the Nearctic Region.

### Acrophasmus Enderlein

Acrophasmus Enderlein, 1912, p. 16. Type-species: A. exilis Enderlein. Monotypic and original designation.

Head transverse or subcubical, temples narrow; first flagellar segment longer than second; forewing (fig. 1) with 3 cubital cells; recurrent vein entering apex of first cubital cell; first brachial cell closed at apex; subdiscoideus leaving first brachial cell below middle of apical end; first segment of mediella short, one-fourth or one-fifth as long as second segment; hindwing of male with a stigma; foretibiae with a row of 5–12 stout spines on anterior edge; tergum (2+3) (fig. 4) with a transverse arcuate furrow behind middle and often with a second transverse furrow behind this curved in opposite direction; digitus of male genitalia usually with a tooth on inner side (fig. 6).

The sculpturing of tergum (2+3), with its transverse grooves rather than oblique basal grooves, and the short first segment of the mediella in the hindwing will distinguish *Acrophasmus* from the other genera in this group.

This genus has been previously recorded only from the Neotropical Region. One described species, *secundus* (Muesebeck and Walkley), and several new species described below were placed in the genus *Doryctinus* in the collection of the U. S. National Museum but are congeneric with *Acrophasmus*.

### KEY TO NEARCTIC SPECIES OF Acrophasmus

Length of first abdominal tergum usually equal to apical width, at most slightly longer, but then abdominal terga beyond (2+3) smooth; female antenna 26-segmented or less
 Length of first abdominal tergum at least 1.5 times longer than apical width; abdominal terga beyond (2+3) sculptured; female antenna 27-segmented or more

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- eye height, temples one-third eye width; body color reddish brown or lighter \_\_\_\_\_\_ ferrugineus Marsh, n. sp. Vertex rounded, not sharply declivous posteriorly; malar space about one-third eye height, temples at least one-half eye width; body color brown or dark brown \_\_\_\_\_\_ arizoneusis Marsh, n. sp.

# **Acrophasmus arizonensis** Marsh, n. sp. (Figs. 8, 9)

Female.—Body length, 5-5.5 mm; ovipositor, 6-7 mm. Color brown to dark brown, head and mesonotum usually darker, legs beyond femora and antennae light brown. Head subcubical, vertex rounded, not declivous behind; temples one-half eye width; malar space one-third eye height; frons not excavated; head entirely finely striate except temples which are usually smooth below; antenna 30-segmented. Propleuron rugose along posterior margin, punctate above propleural groove; anterior mesonotal angles rounded; mesonotal lobes punctate; notauli foveolate, obscured behind by wide rugose area covering posterior onehalf of median mesonotal lobe; scutellar furrow with 6 cross carinae; scutellar disc punctate, margined laterally; mesopleural disc and mesosternum punctate; mesopleural furrow shallow, narrow, weakly foveolate; subalar groove wide, rugose; basolateral areas of propodeum indicated by indistinct carinae, punctate basally; remainder of propodeum rugose. Foretibia with row of 7-8 spines; fore and midlegs nearly smooth, hindlegs finely punctate. Wing venation as in fig. 8; radiella absent or very indistinct. First abdominal tergum 1.5 times longer than apical width, longitudinally rugose, median area indicated basally by 2 indistinct carinae and apically by a raised short area, obscured medially; tergum (2+3) 1.25 times longer than wide, longitudinally rugose except apex which is smooth, both transverse grooves distinct; remainder of abdominal terga punctate on basal one-half, smooth on apical one-half; ovipositor a little longer than body.

Male.—Essentially as in female; antenna 27-segmented; hindwing with a stigma (fig. 9).

Holotype Female.—ARIZONA: Bear Canyon, Hk. Hwy. mi. 12, Santa Catalina Mountains, July 14, 1961, Werner, Nutting, U.V. lt. trap. USNM 69637.

Paratypes.—1♀, 1♂, same data as type. Female paratype deposited in collection of Univ. of Arizona, Tucson; male in U. S. Nat. Mus.

### Acrophasmus butleri Marsh, n. sp. (Figs. 10, 11)

Female.—Body length, 4 mm; ovipositor, 3 mm. Color dark brown except head and forelegs which are lighter brown. Head somewhat transverse; vertex rounded, not declivous behind; malar space one-third eye height; temples about three-fifths eye width; frons and vertex striate, temples weakly striate dorsally, smooth ventrally, face indistinctly rugose; antenna 23-segmented. Propleuron rugosopunctate; propleural groove indistinct; anterior angles of mesonotum prominent, rounded; mesonotal lobes rugosopunctate; notauli indistinct, obscured behind by wide rugose area covering posterior one-half of median mesonotal lobe; scutellar furrow with 7 cross carinae; scutellar disc punctate, margined laterally; mesopleural disc rugosopunctate; mesopleural furrow deep, narrow, weakly foveolate; mesosternum punctate; propodeum entirely rugosopunctate. Foretibia with row of 5-6 spines (forelegs missing in female holotype). Wing venation as in fig. 10; radial cell short, radial vein reaching wing margin well before apex. First abdominal tergum as long as apical width, longitudinally rugosopunctate, raised median area distinct only at apex; tergum (2+3) as long as greatest width, longitudinally rugosopunctate before first transverse groove, rugae disappearing behind so that apical one-fourth of tergum is punctate, first transverse groove very indistinct, second absent; remainder of terga punctate entirely; ovipositor slightly less than body length.

Male.—Essentially as in female; antenna 22-23 segmented; hindwing with

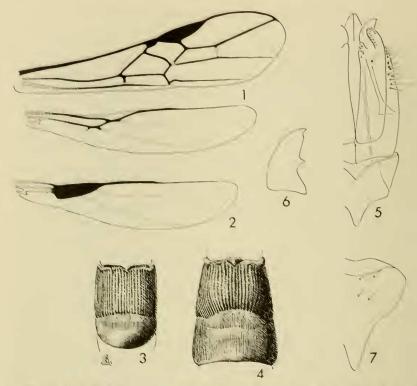
a stigma (fig. 11).

Holotype Female.—ARIZONA: Santa Rita Range Reserve, Pima County, June 2, 1958, G. D. Butler, swept/mesquite. USNM 69638.

Paratypes.—286, same data as type except one dated May 4, 1957. One 8 paratype deposited in collection of Univ. of Arizona, Tucson; other in U. S. Nat. Mus.

# Acrophasmus ferrugineus Marsh, n. sp. (Figs. 1, 2, 4-7)

Female.—Body length, 4.5–7 mm; ovipositor, 4–6.5 mm. Color brownish red to reddish orange; head, lcgs, and venter of abdomen always reddish orange. Head slightly transverse; vertex sharply declivous behind; from slightly depressed; eyes large; malar space about one-fourth eye height; temples about one-third eye width; vertex and temples striate, from and face rugosopunctate; antenna 30-40 segmented. Pronotum short; propleuron rugose; propleural groove broad, foveolate; mesonotum sharply declivous anteriorly, anterior angles rounded; mesonotal lobes punctate; notauli foveolate anteriorly, obscured posteriorly by wide rugose area which covers posterior three-fourths of middle mesonotal lobe; scutellar furrow with 6 cross carinae; scutellar disc flat, punctate; mesopleuron rugosopunctate; mesopleural furrow narrow, weakly foveolate; mesosternum punctate; propodeum entirely rugose, rarely with some indication of a pattern of carinae. Foretibia with an irregular row of 8-12 stout spines; legs mostly punctate. Wing venation as in fig. 1. First abdominal tergum 1.75 times longer than apical width, longitudinally rugose with an indistinct raised median area which narrows apically; tergum (2 + 3) slightly longer than its greatest width, longi-



Figs. 1, 2, 4–7, Aerophasmus ferrugineus, n. sp.: 1, fore and hindwings,  $\S$ : 2, hindwing,  $\S$ : 4, abdominal tergum (2+3), dorsal view: 5,  $\S$  genitalia: 6, digitus: 7, ninth sternum,  $\S$ . Fig 3, A. secundus (Mues, & Walk.), abdominal tergum (2+3), dorsal view.

tudinally rugose before first transverse groove, longitudinally rugosopunctate behind; second transverse groove present, usually weak; remainder of abdominal terga punctate; ovipositor nearly as long as body.

Male,—Essentially as in female; length, 2,4–5,5 mm; autenua 21–32 segmented; head not always as sharply declivous behind; hindwing with a stigma (fig. 2); genitalia as in figs. 5–7.

Holotype Female.—NORTH CAROLINA: Durham, June 30, 1943, J. A. Beal colr., Host: *Celtis laevigata* Weed, USNM 69639.

Paratypes.—GEORGIA: Atlanta, 1 \$\circ\$, June 23, 4938, P. W. Fattig, FLORIDA: Mariana, 4 \$\circ\$, June 19, 1905, W. F. Fiske, MISSOURI: Jefferson City, 1 \$\circ\$, April 22, 1958, A. C. Burrill, ex. *Diospyros virginiana* L. MISSISSIPPI: Doko (?), 1 \$\circ\$, 1 \$\circ\$, April 14, 1920, M. W. Blackman, NORTH CAROLINA: Durham, 5 \$\circ\$, June—Angust, 1943, C. laevigata, Quercus borealis var. maxima (Marsh.) Ashe; Raleigh, 1 \$\circ\$, August 16, 1940, R. C. Barnes, PENNSYLVANIA: Linglestown,

In addition to the type series I have seen specimens of ferrugineus

from Brazil, Guatemala, and the British West Indies.

Host.—Several specimens were reared from Lyctus planicollis Le-Conte in Fraxinus, and from unknown hosts in Celtis laevigata, Quercus borealis var. maxima, and Diospyros virginiana.

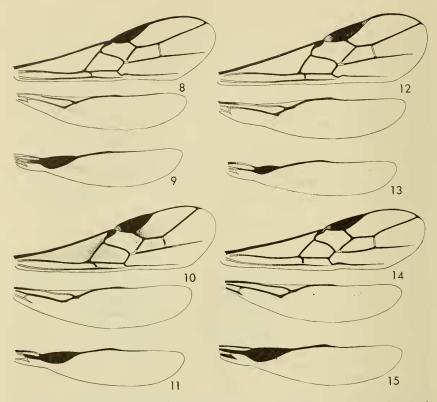
# Acrophasmus lyeti Marsh, n. sp. (Figs. 12, 13)

Female.—Body length, 2.5-4 mm; ovipositor, 2.5-4 mm. Color reddish brown except legs and sometimes apex of abdomen and venter of thorax which are honey yellow. Head subcubical; vertex rounded; eyes large; malar space nearly one-fourth eye height; temples one-third eye width; frons, vertex, and temples finely striate, temples often smooth on lower portion, face rugulose; antenna 18-26 segmented. Propleuron punctate; propleural groove broadening posteriorly, foveolate; mesonotal lobes punctate; notauli foveolate, obscured behind by wide rugose area which covers apical one-half to three-fourths of median mesonotal lobe; anterior mesonotal angles not prominent, rounded; scutellar furrow with 6 cross carinae; scutellar disc punctate; mesoplenral disc and mesosternum punetate; mesopleural furrow narrow, foveolate; subalar groove rugose; propodeum mostly rugose, carinae weakly indicated but forming large arcola medially, basolateral areas punctate. Foretibia with row of 5-7 spines. Wings as in fig. 12. First abdominal tergum one and one-third times longer than apical width, longitudinally rugose, raised median area distinct basally and apically, obscured medially; tergum (2+3) as long as widest part, longitudinally rugose, smooth at apex, first transverse groove distinct, simuate, second groove indistinct; remainder of terga usually smooth and highly polished, at most very finely granular basally; ovipositor equal to length of body.

Male.—Essentially as in female; length, 2–3 mm; antenna 17–23 segmented; hindwing with a stigma (fig. 13).

Holotype Female.—FLORIDA: Indian River County, June 10, 1957. USNM 69640.

Paratypes.—FLORIDA: Crescent City,  $11\ \circ \circ$ ,  $8\ \circ \circ$ , reared from bamboo infested with *Lyctus striatus* Melsheimer; Indian River County,  $8\ \circ \circ$ ,  $1\ \circ$ , June 10, 1957; Lake City,  $1\ \circ$ ,  $1\ \circ$ , H. G. Hubbard, ex *Lyctus* in bamboo. LOUISIANA: Tallula,  $8\ \circ \circ$ ,  $15\ \circ \circ$ , October 5, 1939, M. B. Christian, ex *Lyctus* infested Pecan. NORTH CAROLINA: Watauga County,  $3\ \circ \circ$ , ex-hickory rake handle infested with powder post beetles. SOUTH CAROLINA: Ferguson,  $3\ \circ \circ$ ,



Figs. 8–15, wings of *Acrophasmus* species: 8, *arizonensis*, n. sp.,  $\mathcal P$  fore and hindwing; 9, same,  $\mathcal P$  hindwing; 10, *butleri*, n. sp.,  $\mathcal P$  fore and hindwing; 11, same,  $\mathcal P$  hindwing; 12, *lycti*, n. sp.,  $\mathcal P$  fore and hindwing; 13, same,  $\mathcal P$  hindwing; 14, *secundus* (Mues. & Walk.),  $\mathcal P$  fore and hindwing; 15, same,  $\mathcal P$  hindwing.

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Hosts.—Lyctus sp. and L. striatus in bamboo.

Acrophasmus secundus (Muesebeck and Walkley), n. comb. (Figs. 14, 15)

Heterospilus texanus Ashmead, 1896, p. 214. Holotype male in U. S. Nat. Mus., no. 58860, preocc. in *Doryctinus* by Ashmead, 1889.

Doryctinus secundus Muesebeck and Walkley, 1951, p. 178. New name for texanus Ashmead, 1896.

Female.—Body length, 3.5–6 mm; ovipositor, 5–10 mm. Color dark brown, tarsi and antennae brown, tibiae with white annulus at base. Head nearly cubical; vertex rounded, not sharply declivous behind; temples two-thirds eye width; malar space about one-third eye height; vertex, frons, and face

rugosopunctate, from sometimes appearing striate in smaller specimens, temples transversely striate, often smooth on lower portion; antenna 27-34 segmented. Propleuron rugose; propleural groove very broad; mesonotal lobes rugosopunctate, anterior mesonotal angles prominent but rounded, median mesonotal lobe slightly depressed anteriorly between angles; notauli foveolate anteriorly, obscured posteriorly by wide rugose area which covers posterior three-fourths of middle mesonotal lobe; scutellar furrow with 6 cross carinae; scutellar disc punctate, margined laterally; mesopleuron rugose; mesopleural furrow broad, foveolate; mesosternum striatopunctate; propodeum entirely rugose with lateral carinae and areola occasionally weakly indicated. Legs granular; foretibia with row of 8-10 stout spines. Wing venation as in fig. 14. First abdominal tergum 1.5 times longer than apical width, longitudinally rugose, often with an indistinct raised median area; tergum (2+3) 1.25 times longer than greatest width, longitudinally rugose except apex which is smooth; first transverse groove very distinct, second usually absent, occasionally indicated by a weak indentation; remainder of terga granular on basal three-fourths, smooth on apical one-fourth; ovipositor at least 1.5 times longer than body.

Male.—Essentially as in female; hindwing with a stigma (fig. 15).

Type Locality.—Cypress Mills, Texas.

Distribution.—Georgia, Louisiana, Massachusetts, Michigan, Missouri, New Jersey, Ohio, Pennsylvania, Rhode Island, Texas, Virginia; Mexico (Cuernavaca).

### Glyptocolastes Ashmead

Glyptocolastes Ashmead, 1900, p. 142. Type-species: Glyptocolastes texanus Ashmead. Monotypic and original designation.

Glyptodoryctes Ashmead, 1900, p. 144. Type-species: Heterospilus caryae Ashmead. Monotypic and original designation. New synonymy.

Head somewhat transverse, narrow behind the eyes; first flagellar segment longer than second; thorax stout; forewing with 3 cubital cells; second segment of radius often shorter than first intercubitus; recurrent vein entering apex of first cubital cell; subdiscoideus leaving first brachial cell below its middle; first segment of mediella at least equal to second segment, usually longer; foretibia with row of 6–10 stout spines; abdominal tergum (2+3) with oblique diverging grooves which set off basal corners of tergum (fig. 24), rarely these grooves are connected medially by a fine transverse line.

Ashmead (1900) characterized *Glyptocolastes* and *Glyptodoryctes* only as he included them in his key to the Ichneumonoidea. Similarities in wing venation, sculpture of tergum (2+3), and general habitus leaves no doubt that the type-species of these genera are congeneric. In 1909, Crawford described the species *bruchivorus* and placed it in *Glyptocolastes*. However, because of differences in male genitalia, wing venation, and habitus, I feel that this species is not congeneric with *texanus* and *caryae* and is quite distinct from all

genera of the Doryctinae, a fact which warrants a separate generic placement for it (see below).

### KEY TO SPECIES OF Glyptocolastes

| 1. | Females2  |
|----|---|
|    | Males 3   |
| 2. | First abdominal tergum shorter than apical width, at most equal; second   |
|    | segment of radius shorter than first intercubitus texanus Ashmead         |
|    | First abdominal tergum longer than apical width; second segment of radius |
|    | usually equal to or longer than first intercubitus caryae (Ashmead)       |
| 3. | Hindwing with a stigma caryae (Ashmead)                                   |
|    | Hindwing without a stigma texanus (Ashmead)                               |

# Glyptocolastes caryae (Ashmead), n. comb. (Figs. 16, 17, 20, 21, 24)

Heterospilus caryae Ashmead, 1896, p. 214. Holotype female in U. S. Nat. Mus., no. 69559.

Glyptodoryctes caryae (Ashmead), 1900, p. 144.

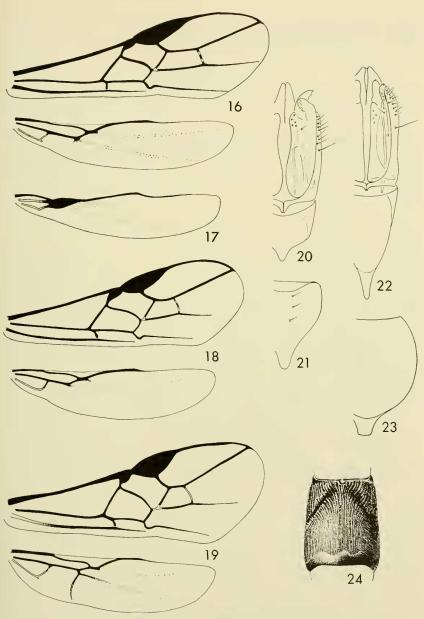
Hormiopterus claripennis Brues, 1907, p. 61. Holotype female in Milwaukee, Wisconsin, Public Museum.

Female.—Body length, 2.5-6 mm; ovipositor, 2-6 mm. Color light to dark brown, legs usually brown or honey yellow. Head transverse, temples about two-fifths eye width, somewhat wider in smaller specimens; malar space about one-fourth eye height; face roughened except for raised smooth line down middle; temples usually smooth; from and vertex transversely striate; vertex in larger specimens declivous behind; antenna 23-37 segmented. Pronotum very short; propleuron rugose; propleural groove deep, foveolate; mesonotum strongly declivous anteriorly, dorsal surface at right angles with anterior surface; mesonotal lobes punctate; notauli deep, foveolate, obscured behind by wide rugose area which is about as wide as scutellar disc; scutellar furrow with 7 cross carinae; scutellar disc punctate; mesopleural disc punctate; mesopleural furrow deep, foveolate; subalar groove wide, rugose; mesosternum punctate; propodeum strongly rugose, carinae usually not distinct but rugae occasionally forming areola medially. Hindcoxae punctate laterally, rugose dorsally; femora punctate. Wing venation as in fig. 16; second segment of radius usually longer than first intercubitus; first segment of mediella longer than second, usually much longer. First abdominal tergum about 1.5 times as long as apical width, strongly longitudinally rugose, with a weakly defined raised median area; tergum (2+3) slightly longer than wide, oblique grooves deep and occasionally connected across tergum by a semicircular fine line or groove (fig. 24); tergum (2+3) longitudinally rugosopunctate on nearly its entire length, smooth only at extreme apex; remainder of terga granular at least basally; ovipositor nearly as long as body.

Male.—Essentially as in female; length, 2.5–4 mm; antenna 21–32 segmented; hindwing with a stigma (fig. 17); genitalia as in figs. 20, 21.

Type Locality.—Morgantown, West Virginia.

Distribution.—Arkansas, Florida, Georgia, Kansas, Maryland, Missis-



Figs. 16, 17, 20, 21, 24, Glyptocolastes caryae (Ashm.): 16, fore and hindwing,  $\circ$ ; 17, hindwing,  $\circ$ ; 20,  $\circ$  genitalia; 21,  $\circ$  ninth abdominal sternum; 24, abdominal tergum (2+3), dorsal view. Fig. 18, G. texanus Ashm., fore and hindwing,  $\circ$ . Figs. 19, 22, 23, Stenocorse bruchivora (Cwfd.): 19, fore and hindwings,  $\circ$ ; 22,  $\circ$  genitalia; 23,  $\circ$  ninth abdominal sternum.

sippi, New York, North Carolina, Pennsylvania, South Carolina, Texas, Virginia, Washington, D. C., West Virginia.

Host.—Scobicia bidentata (Horn).

# Glyptocolastes texanus Ashmead (Fig. 18)

Glyptocolastes texanus Ashmead, 1900, p. 142. Holotype female in U. S. Nat. Mus., no. 14167.

Female.—Body length, 2-4 mm; ovipositor, 1-2 mm. Color entirely brown or dark brown except legs, lower part of head, and mouthparts which are often light brown or honey yellow. Head somewhat transverse; temples about onehalf eye width; malar space one-third eye height; vertex and frons transversely striate, face roughened, temples smooth at least on lower portion; vertex declivous behind in larger specimens; antenna 19-27 segmented. Pronotum short; propleuron rugosopunctate; propleural groove shallow, indistinctly foveolate; mesonotum strongly declivous anteriorly, anterior and dorsal surfaces at right angle or greater; mesonotal lobes punctate; notauli shallow, foveolate, obscured posteriorly by rugose area which is usually not as wide as scutellar disc; scutellar furrow with 7 cross carinae; scutellar disc punctate, margined laterally; mesopleural disc rugosopunctate; mesopleural furrow shallow, weakly foveolate; subalar groove indistinct; propodeum rugose, basolateral areas often punctate. Hindcoxae punctate, often rugose dorsally; femora punctate. Wing venation as in fig. 18; second segment of radius usually shorter than or equal to first intercubitus; first segment of mediella longer than second. First abdominal tergum usually shorter than apical width, at most equal, longitudinally rugose, with narrow raised median area; tergum (2+3) wider apically than long, longitudinally rugosopunctate on basal three-fourths, oblique grooves shallow; remainder of terga punctate basally, smooth apically; ovipositor about as long as abdomen plus one-half of thorax.

Male.—Essentially as in female; hindwing without a stigma.

Type Locality.—San Diego, Texas. Distribution.—Arizona, Texas; Baja California. Host.—Dendrobiella quadrispinosa (Lec.).

#### Stenocorse Marsh, n. gen.

 ${\bf Type\text{-}species:} \ \ Glyptocolastes\ bruchivorus\ {\bf Crawford.}$ 

Head transverse; temples narrow, equal to one-half eye width or less; thorax robust; notauli weakly or not at all defined; second segment of radius of forewing equal to or shorter than first; radius reaching wing margin before apex of wing; stigma broad; recurrent vein entering base of first cubital cell; subdiscoideus leaving first brachial cell near its base; nervulus postfurcal; radiella of hindwing weak or absent; first segment of mediella longer than second; postnervellus usually curved toward wing apex; hindwing of male without stigma; foretibia with row of 8-12 short spines on outer edge; femora and tibiae somewhat swollen; abdomen short, broadly oval; abdominal tergum (2+3) with a bisinuate transverse groove or weak line on basal one-half; ovipositor not longer than abdomen; digitus and cuspis of male genitalia truncate.

As mentioned earlier, Glyptocolastes bruchivorus is quite distinct from most Doryctinae and certainly does not belong in that genus which is exemplified by G. texanus Ashmead. Therefore, the above new genus is proposed for this species and several, as yet undescribed, Neotropical ones. Of particular importance in distinguishing Stenocorse is the transverse head and narrow temples, the robust habitus, the short second segment of the radius, the sculpture of abdominal tergum (2+3), and the structure of the male genitalia.

Species in this genus are apparently parasites of seed beetles in the family Bruchidae and are distributed from the southwestern United States to South America and the West Indies. The Nearctic Region contains one species, the type-species of the genus.

Stenocorse bruchivora (Crawford), n. comb. (Figs. 19, 22, 23)

Glyptocolastes bruchivorus Crawford, 1909, p. 203. Holotype female in the U. S. Nat. Mus., no. 12816.

Female.—Length of body, 3-4.5 mm; ovipositor, 0.75-1.5 mm. Thorax and abdomen reddish-brown, head and legs lighter brown, legs sometimes honey yellow, mesonotum, mesopleuron, and abdominal terga often marked with black, propodeum often entirely black; entire body with a thick covering of gold hair. Head rugose, vertex strongly so; frons slightly excavated; malar space one-third eye height; temples slightly less than one-half eye width; antennae 20-27 segmented. Thorax short and broad, nearly as broad between tegulae as high; pronotum extremely short; propleuron longitudinally rugose; mesonotum sharply declivous anteriorly, coarsely rugose; notauli weak, indicated by coarser rugae, meeting posteriorly in a wide rugose area; scutellar furrow with 5 cross carinae; scutellar disc flat, granular; mesopleural disc rugulopunctate; subalar groove wide, foveolate; mesopleural furrow wide, deep, weakly foveolate, about two-thirds mesopleural width; mesosternum granular, short transverse rugae on either side of median sternal groove; propodeum sharply declivous posteriorly, dorsal surface about as long as scutellar disc, strongly rugose, occasionally with granular basolateral areas and a short basal carina. Wing venation as in fig. 19; second segment of radius never longer than first; nervulus postfurcal by about its own length. Femora and tibiae somewhat swollen, femora about three times as long as wide: tarsi short, hind basitarsus about as long as first flagellar segment; last segment of hindtarsus equal in length to second. Abdomen about as long as thorax, oval, strongly arched; first tergum longitudinally rugose, about one and one-half times wider at apex than long, abruptly declivous basally, with two longitudinal carinae converging toward apex; tergum (2+3) two-thirds as long as apical width, longitudinally rugose except for apical one-fourth which is granular; tergum (2+3) with a bisinuate transverse groove across basal one-half which is sometimes represented only by a weak line, lateral sections of this groove sometimes extend to base of tergum; remainder of abdominal terga granular; ovipositor at most equal in length to abdomen beyond first tergum.

Male.—Essentially as in female; length of body, 2.5–4.5 mm; genitalia as in figs. 22, 23; digitus and cuspis truncate, ninth sternum broad.

Type Locality.—Victoria, Texas.

Distribution.—Arizona, Texas; Mexico, Canal Zone, Peru; Hawaii. Hosts.—Algarobius prosopis (Lec.), Acanthoscelides quadridentatis (Schaffer), Mimosestes sallaei (Sharp), Megacerus sp.

### **Doryctinus** Roman

Doryctinus Roman, 1910, p. 122. Type-species: Exothecus rugulosus Cresson. Monotypic and original designation.

Roman proposed this genus on the basis of assumed topotypic material of Exothecus rugulosus. His brief description and illustrations indicate that this material was not conspecific, and probably not congeneric, with E. rugulosus. The type of rugulosus is, however, unique and apparently intermediate between Glyptocolastes and Acrophasmus. The first segment of the mediella in the hindwing of rugulosus is slightly shorter than in species of Glyptocolastes, but longer than in species of Acrophasmus. The sculpturing of tergum (2+3) combines the oblique basal grooves of Glyptocolastes and the transverse furrows of Acrophasmus. In general habitus, E. rugulosus appears similar to G. caryae. Other than the holotype female, I have seen only two females which can be referred to Doryctinus. Until I am able to see more material of this group, particularly males, I wish to retain it as a distinct genus. A second species referred to Doryctinus, secundus (Muesebeck and Walkley), is now placed in the genus Acrophasmus (see before).

### Doryctinus rugulosus (Cresson)

Exothecus rugulosus Cresson, 1872, p. 190. Holotype female in U. S. Nat. Mus., no. 1620.

Doryctes texanus Ashmead, 1889, p. 627. Holotype female in U. S. Nat. Mus., no. 2930 (same specimen as E. rugulosus Cresson).

Female.—Body length, 6 mm; ovipositor, 5 mm. Head, legs, and abdomen brown, thorax darker brown. Head somewhat transverse; temple slightly less than one-half eye width; malar space about one-third eye height; vertex and frons striate, temples smooth, face rugulose except for smooth median longitudinal raised line; vertex narrow, declivous posteriorly; antenna broken in type, first flagellar segment longer than second. Pronotum short, nearly vertical; propleuron rugose, propleural groove deep, foveolate; mesonotum sharply declivous anteriorly; mesonotal lobes punctate, median one with an indistinct median longitudinal foveolate line on anterior face; notauli foveolate anteriorly; scutellar disc granular; mesopleural disc and mesosternum punctate; mesopleural furrow foveolate; subalar groove wide, rugose; propodeum rugose, without carinae. Legs including coxae punctate. Second segment of radius about as long as first intercubitus; recurrent vein entering extreme apex of first cubital cell; radiellen

cell strongly narrowing toward apex, radiella reaching wing margin before wing apex; first segment of mediella equal to second. First abdominal tergum longer than apical width, longitudinally rugose; tergum (2+3) with 2 wide, shallow, longitudinal, diverging grooves on basal one-half and 2 narrow, deep, transverse grooves across middle; remainder of abdominal terga granular; ovipositor nearly as long as body.

Type Locality.—Texas.

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#### THE SYNONYMY OF AMOEBALERIA SACKENI GARRETT

(Diptera: Heleomyzidae)

A series of 21 specimens, all taken in the same cave (Equality Cave, Saline County, Illinois, 22 May-15 October 1967) by Ronald A. Brandon, of Southern Illinois University, and kindly submitted by him for determination, shows variation between the conditions considered typical of *Amoebaleria defessa* Osten Sacken, 1877, and A. sackeni Garrett, 1925 (v. Gill, 1962, Proc. U.S. Nat. Mus. 113: 578–580; Steyskal, 1967, Proc. Ent. Soc. Wash. 69:296). The variation indicates that the form described as A. sackeni is no more than that assumed by the larger or more robust specimens of A. defessa. A. sackeni Garrett should, therefore, be considered a synonym of A. defessa Osten Sacken.—George C. Steyskal, Systematic Entomology Laboratory, Entomology Research Division, Agr. Res. Serv., USDA, c/o U.S. National Museum, Washington, D.C. 20560.